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Budget conference could cast wide net

Erik Wasson, The Hill October 28, 2013 LINK

The prospects for the House and Senate to reach a new budget deal appear to be increasing in the days leading up to Wednesday's first meeting of the House-Senate budget conference committee created by this month's debt-ceiling deal.

Both Republicans and Democrats are making efforts to appear reasonable, and the focus has shifted to a small deal that would replace some or all of the \$91 billion in automatic sequester cuts that have hit the 2014 budget.

The House-Senate budget conference will have six weeks to come up with a plan by its Dec. 13 deadline. After that, each chamber will have until Jan. 15 to deal with any recommendations before the federal government's funding comes to a halt again.

The conference could conceivably focus on the problematic deficit "grand bargain" that has eluded a divided Washington since 2010.

Such a \$2 trillion to \$6 trillion debt-cutting plan would remake the government

and implicate most -- if not all -- of the major federal entitlements and the entire tax code.

But achieving even a \$1.2 trillion deal stymied the 2011 debt "supercommittee" that failed just before Thanksgiving two years ago.

Members appear to be leaning toward playing small ball this time.

Senate Majority Leader Harry Reid (D-Nev.) said Friday that the budget conference committee convening next week should focus on a replacement for sequestration and forget "happy talk" about a grand bargain.

"We are not going to have a grand bargain in the near future," he said in a KNPR interview.

House Budget Committee Chairman Paul Ryan (R-Wis.) told reporters last week that the conference should focus on what's "achievable."

The hang-up for any sequester achievement has been revenue: Democrats have demanded tax increases in exchange for any changes to entitlements like Social Security and Medicare, but Republicans have balked.

In a speech on the budget conference, Treasury Secretary Jack Lew on Thursday downplayed the need for taxes and only once mentioned them, saying it was "crucial that we close wasteful tax loopholes" to reduce the deficit.

He said House and Senate budget negotiators should replace the sequester with other spending cuts.

House Budget conferee Rep. Tom Cole (R-Okla.) also called on the GOP to compromise with the administration and put revenue on the table, although he later clarified that he was not talking about tax increases.

Even if the budget agreement is small, it still has the potential to affect a wide swath of economic sectors and interest groups. This is as true for what will be in the deal as for what will be left out.

Here's a look at some of the specifics by sector:

DEFENSE

The defense industry has the most riding on the budget conference.

If no deal is reached, an additional \$19 billion is slated to come out of the Pentagon's budget in January on top of the sequester cuts already in effect.

Analysts say that contracting is the area that is easiest to cut.

Underscoring the importance of the budget conference to defense, Republicans on the House Armed Services Committee wrote to Ryan and Senate Budget Committee Chairwoman Patty Murray (D-Wash.) on Oct. 23 to urge a deal.

"Continued sequestration would lead to the reduction of an additional 100,000

soldiers, sailors, Marines, and airmen from our Armed Forces, and cancellation of important programs providing key technologies and capabilities that allow our military to stay ahead of the threat," the letter said.

One possible outcome to the conference could be a deal that simply allows Defense Secretary Chuck Hagel to have more flexibility in implementing the sequester.

AGRICULTURE

The surest way to enact a 2013 farm bill could be to wrap it into a year-end budget deal, agriculture lobbyists say. The House farm bill contains a total of \$53 billion in deficit savings over 10 years, enough to replace more than half of this year's sequester cuts.

A farm bill conference committee begins the same day as the budget conference. The primary stumbling block to the deal will be reconciling the \$40 billion in food stamp cuts in the House farm bill and the \$4.5 billion in the Senate version.

Both farm bills also have less savings from agriculture subsidies than either Ryan or President Obama have sought. While both get rid of the direct payment subsidies based on historical planting, they use the savings to bolster crop insurance and create a new form of revenue protection.

The situation could give the farm bill negotiators added motivation to come to a deal before Ryan and Murray do.

TAX

A budget agreement offers the tantalizing possibility of bypassing Senate filibuster rules through a process known as reconciliation. Budget reconciliation has been used in the past to enact major controversial legislation, including the Bush-era tax rates and ObamaCare.

Groups interested in tax reform, including the National Association of Manufacturing, have been advocating that the budget conference committee recommend instructions to the tax-writing committees to complete a tax code overhaul early next year. Such instructions could be vague but they could also include a revenue target and describe what the final individual rates would look like.

Given the increased talk of a small deal and de-emphasis of the need for revenue by the White House, tax reform instructions for now appear to be unlikely.

ENERGY

House Democrats have repeatedly sought to close tax breaks favored by the oil and gas industry in their approach to replacing the sequester. For this reason it is considered possible but unlikely that large energy tax increases could come out of the budget deal.

In formulating their approach to the debt-ceiling this fall, House Republicans pushed a provision that would force the administration to permit the controversial Keystone XL oil pipeline.

An early draft GOP proposal from September included a grab-bag of legislation

including less regulation on coal ash, increased offshore drilling permits and a law giving Congress greater ability to block regulations with major economic impact.

The final debt-ceiling deal with the Senate and White House contained none of these demands, and the GOP was only able to save face by winning a small certification that the incomes of those receiving ObamaCare subsidies are verified.

For these reasons, the chances of major changes to the energy sector coming out of the budget deal are not considered great.

HEALTHCARE

A major healthcare deadline looms at the end of the year, making it possible that major changes will be included in any Dec. 13 budget agreement.

Under current law, physician payments from Medicare are slated to rise sharply unless Congress once again passes a "doc fix."

The problem for the doc fix remains how to offset reduction elsewhere. Once Congress starts looking for offsets in healthcare spending, it could be motivated to use some savings for a sequester replacement.

A large or medium-sized deficit deal would likely need to include changes to the major health entitlements. Obama's budget this year had greater means testing for Medicare and a change in the way inflation is calculated for all benefits and tax brackets known as a "chained" consumer price index (CPI).

Given Reid's hard line on a grand bargain and Ryan's talk of playing small ball, changes to Medicare appear less likely at this time.

NRC Waste Confidence Notice/Scheduling public meetings

NRC

October 28, 2013

The Waste Confidence Directorate would like to inform you of some important news.

- 1) Due to the lapse in Federal funding and the subsequent shutdown of the NRC, the NRC has extended the comment period on the Waste Confidence Draft Generic Environmental Impact Statement (DGEIS) and proposed rule to FRIDAY, DECEMBER 20, 2013.
- 2) The Ohio and Minnesota public meetings have been rescheduled:

Monday, December 2 Perrysburg, Ohio Hilton Garden Inn Toledo/Perrysburg 6165 Levis Commons Blvd., Perrysburg, OH 43551 Open House 6:00-7:00 p.m. EST Meeting 7:00-10:00 p.m. EST Wednesday, December 4
Minnetonka, Minnesota
Minneapolis Marriott Southwest
5801 Opus Parkway
Minnetonka, MN 55343
Open House 6:00-7:00 p.m. CST
Meeting 7:00-10:00 p.m. CST

3) On Monday, December 9, 2013, we will be holding a public teleconference to accept spoken comments on the Waste Confidence DGEIS and proposed rule. The NRC will begin the teleconference with a short introduction, and then we will open the phone lines to receive comments on the DGEIS and proposed rule. The teleconference will be transcribed by a court reporter.

Date: Monday, December 9, 2013 Time: 1:00 p.m. - 4:00 p.m. EST

To participate in the December 9 public comment teleconference, please dial 1-800-475-8385 and provide the operator with passcode 3480498.

- 4) We have meeting summaries and transcripts of our October 1 Rockville and October 3 Denver public meetings to share:
- Rockville Meeting Summary (ML13282A611) http://pbadupws.nrc.gov/docs/ML1328/ML13282A611.pdf and Transcript
- (ML13277A455) http://pbadupws.nrc.gov/docs/ML1327/ML13277A455.pdf.

 Denver Meeting Summary
- (ML13295A427) http://pbadupws.nrc.gov/docs/ML1329/ML13295A427.pdf and Transcript
- (ML13282A605) http://pbadupws.nrc.gov/docs/ML1328/ML13282A605.pdf.
- 5) And finally, a reminder that we are having a public status update teleconference this Wednesday, October 30, from 1:30 p.m. to 2:30 p.m. EST to present the rescheduled public meetings and the extended comment period. Discussions during the October 30 teleconference will not be considered as official comments on the DGEIS and proposed rule. To participate in the October 30 status update teleconference, please dial 1-888-323-6436 and provide the operator with passcode 7160878.

Please visit our Waste Confidence Public Involvement webpage at http://www.nrc.gov/waste/spent-fuel-storage/wcd/pub-involve.html for information on how to submit written comments, the extended public comment period, and upcoming public meetings. If you have further questions please call or e-mail Sarah Lopas at (301) 287-0675 or Sarah.Lopas@nrc.gov.

Bill Gates visit to Idaho validates innovation role for national laboratories

Idaho National Laboratory October 24, 2013 LINK IDAHO FALLS -- Privately funded research utilizing government owned facilities validates the important role national laboratories have in advancing innovation. Bill Gates, American business magnate and chair of the nuclear reactor startup company TerraPower, LLC, and his staff toured the Materials and Fuels Complex at Idaho National Laboratory. TerraPower has engaged Idaho National Laboratory to support certain aspects of design for Terrapower's traveling wave reactor, and the visit focused on demonstrating the lab's expertise and capabilities. During his visit on Wednesday of this week, he proclaimed the studies conducted by scientists and engineers as "incredibly important."

When addressing employees after his tour Gates said, "Getting to visit INL was really enlightening. It was amazing to see reactor fuel analysis and how it can be conducted safely in a hot cell environment."

"Terrapower has many cooperative projects and there are lots of partnerships, but our work with INL is singularly important," said Gates. TerraPower has gained attention for both its traveling wave reactor design and the financial backing of clean technology investors. Several Cooperative Research and Development Agreements (CRADAs) established over the past few years enable the company to receive technical insight from the nation's nuclear energy laboratory and use its vast capabilities.

"We enjoyed showing off our experienced researchers and one-of-a-kind capabilities for Mr. Gates," said Laboratory Director John Grossenbacher. "His interest in nuclear energy and INL's contributions helps the industry's future and reinforces the value of DOE's national laboratory complex."

CRADAs and other agreements exemplify how INL helps advance industrial development by sharing its expertise with both start-ups and established energy companies. The formal agreements signed with TerraPower are part of a long DOE tradition to make national lab capabilities available to businesses developing new technologies.

"The lab's rich history of nuclear energy research has established capabilities and created a wealth of information that will help TerraPower as it moves forward." said Doug Toomer, INL's director of industry programs for Nuclear Science and Technology.

One of INL's primary missions is to help develop nuclear fuels with significantly improved performance. As a result, the lab has extensive expertise in nuclear fuel behavior and design. The CRADAs between INL and TerraPower take advantage of this expertise and cover a number of areas from sharing data and analyses gleaned from operation of the Experimental Breeder Reactor-II, to fabrication and irradiation of advanced nuclear fuel rods followed by post-irradiation examination.

"When a private company, such as TerraPower, shows interest in what INL does and formalizes a partnership to utilize our expertise and unique infrastructure, we know that we are doing a great job and making a meaningful impact on nuclear energy development, " said Kemal Pasamehmetoglu, INL's associate laboratory director for Nuclear Science and Technology.

Such INL support is available and used by a number of companies in the nuclear energy industry, including other nuclear start-ups such as NuScale Power, and veteran companies such as Babcock & Wilcox, Westinghouse and General Electric. CRADAs and Work for Others agreements are just two of the mechanisms that enable private industry to access the expertise, facilities and capabilities that exist in the DOE's national laboratory complex.

TerraPower is a nuclear energy technology company, headquartered in Bellevue, Wash. It is a privately funded company with the mission to advance scalable, sustainable, low-carbon and cost-competitive energy solutions. TerraPower's traveling wave reactor is a central project that presents new innovation opportunities in the fields of engineering, physics and computer science. Since the company's inception in 2007, it has grown to nearly 70 full-time professionals who engage diverse technical consultants and partners to responsibly improve options for global access to clean, secure and affordable electricity. Visit TerraPower at www.terrapower.com.

INL is one of the DOE's 10 multiprogram national laboratories. The laboratory performs work in each of DOE's strategic goal areas: energy, national security, science and environment. INL is the nation's leading center for nuclear energy research and development. Day-to-day management and operation of the laboratory is the responsibility of Battelle Energy Alliance.

See more news and feature stories at www.inl.gov. Follow @INL on Twitter or visit our Facebook page at www.facebook.com/ldahoNationalLaboratory.

Nuclear Weapons: Information on Safety Concerns with the Uranium Processing Facility

GAO Report October 25, 2013 LINK

The Defense Nuclear Facilities Safety Board (Safety Board) has raised concerns with the National Nuclear Security Administration's (NNSA) plans to construct the Uranium Processing Facility (UPF), and NNSA has taken steps to address many of these concerns. Specifically:

- In 2009, NNSA--a separately organized agency within the Department of Energy (DOE)--decided to expedite the construction of the UPF by combining two major project milestones, deviating from the process established by DOE orders and standards for developing a key interim safety document, and instead developed alternative safety documentation. The interim safety document is to identify the potential accidents and hazards associated with the facility's operations and the controls employed to mitigate or prevent their impact. In 2010, the Safety Board, an independent executive branch agency that assesses safety conditions at DOE defense nuclear facilities, raised concerns about this approach, and a subsequent independent project review recommended that NNSA follow the safety document development process established by DOE orders and standards. NNSA then took action in 2011 to follow the established process, and Safety Board officials stated that NNSA's corrective actions addressed many of their concerns.
- As part of its ongoing oversight, in June 2013 the Safety Board had identified

15 specific safety concerns with the UPF's design, and NNSA has agreed to take action to address 14 of these concerns. Safety Board staff and NNSA officials agreed that none of the 15 concerns should prevent the UPF from reaching its next project management milestone in 2015 as scheduled. In addition, on August 26, 2013, the Safety Board sent NNSA a project letter that identified 12 additional specific safety concerns and NNSA officials said they are currently reviewing the Safety Board's letter and preparing a response.

• The Safety Board raised general concerns with NNSA's plans to defer the installation of some uranium processing capabilities into the UPF at a later date and after the UPF is operational. NNSA currently plans to install some uranium processing capabilities into the UPF in phases, after the building's exterior, support systems, and some processing capabilities have been completed. However, NNSA officials said that the agency does not plan to complete final design and safety work for the deferred capabilities until after the initial phase of the UPF is operational. Safety Board staff stated that this project execution strategy introduces safety-related risks that will challenge the project's ability to integrate safety into the design. In addition, Safety Board staff stated that performing a major modification to an operating nuclear facility can present safety issues if not carefully planned and executed. In response, NNSA officials have said that the UPF project team will need to conduct and document additional safety analyses to ensure that such modifications meet DOE's safety requirements.

House Hearing to Examine B-61 Warhead Modernization Program

Global Security Newswire October 28, 2013 LINK

A House Armed Services Committee subpanel on Tuesday is slated to examine efforts to modernize the B-61 nuclear warhead, a program that has been troubled by escalating costs and schedule over-runs brought on by budget cuts and management issues.

Members of the HASC Strategic Forces Subcommittee are scheduled to hear testimony from Donald Cook, deputy administrator for defense programs at the National Nuclear Security Administration; Madelyn Creedon, assistant secretary of Defense; and Air Force Gen. Robert Kehler, head of Strategic Command.

The refurbishment of the U.S. arsenal of B-61 gravity bombs -- approximately 200 of which are still fielded at six overseas bases belonging to NATO allies -- is now projected to cost a total of \$8.2 billion, according to the National Nuclear Security Administration. However, a separate assessment conducted by the Defense Department's Cost Assessment and Program Evaluation office found the final price tag would probably be nearer to \$10.4 billion, noted the Project On Government Oversight in a recent blog post.

A \$30 million cut to the program's fiscal 2013 budget necessitated by "sequestration" budget cuts is expected to bring the project six more months behind schedule. The lowered budget and schedule delay means the B-61 Life Extension Program likely will rise by another estimated \$230 million, according to the POGO analysis.

NNSA officials are currently enacting \$60 million in fiscal 2014 cuts to the project as a result of program management changes and the continued imposition of the automatic, across-the-board sequestration cuts spurred in part by the 2011 Budget Control Act.

The gravity bomb's life-extension program is presently in the development and engineering stage. The effort is intended to modernize both nuclear and non-nuclear parts of the decades-old warhead, which has already been in service 10 years longer than was first planned, according to an NNSA press release.

The modernization effort has been opposed by arms-control advocates who question its expense and efficacy given the Obama administration's stated ambition of further reducing the U.S. nuclear arsenal through negotiated bilateral cuts with Russia that are hoped to encompass tactical warheads such as the B-61.

"It's important that our elected officials realize the extent to which the costs of this program have spiraled out of control," wrote POGO national security analyst Ethan Rosenkraanz, whose organization is focused on exposing government misconduct, waste and corruption.

"Given the current economic climate, asking U.S. taxpayers to shoulder the burden of refurbishing this weapon without a critical mission and plagued with cost overruns is irresponsible," Rosenkraanz said.

Cost Concerns Could Prompt New Look at Warhead Modernization Plan

Douglas P. Guarino, Global Security Newswire October 25, 2013 LINK

WASHINGTON -- The Obama administration might reconsider a potentially costly plan to upgrade certain nuclear warheads because of increasing budget constraints and skepticism from lawmakers and some military officials, congressional aides and other observers say.

As part of its fiscal 2014 budget proposal, the Energy Department earlier this year introduced a 25-year plan which it said could ultimately reduce the overall number of warheads in the U.S. arsenal by creating interoperable warheads capable of multiple tasks. The first such warhead, to be called the "IW-1," would replace both the existing W78 warhead -- fitted on intercontinental-ballistic missiles launched from the ground -- and the W88 warhead, used on submarine-launched ballistic missiles.

The proposal prompted concerns from lawmakers on both sides of the aisle. Report language accompanying appropriations and authorization bills approved earlier this year in both the Republican-controlled House and Democratic-run Senate -- which are not yet signed into law -- encourages the administration to first study the cost of refurbishing the existing W78 and W88 warheads before committing to the development of an interoperable replacement for both.

The Navy also expressed reservations about the plan, even before the administration formally introduced it this year. In a September 2012 memo to the U.S. Nuclear Weapons Council -- an interagency organization of the Energy and Defense Departments -- the Navy said it did not support entering into the next phase of study related to developing a combined W78/W88 life extension program "at this time." It suggests "delaying this study effort until the mid 2020s."

The memo, obtained by the Livermore, Calif.-based watchdog group Tri-Valley CAREs and Nuclear Watch New Mexico, noted the Navy is not even scheduled to start planning for the W88 refurbishment until fiscal 2020, and therefore has not budgeted to spend funds related to such an effort before that time. It also raised concerns that the Energy Department's National Nuclear Security Administration already is missing budgetary and scheduling targets for its existing weapons work. Such work includes refurbishment of the Navy's W76 warhead, which is already ongoing, and which the Navy considers a higher priority.

According to the Navy, "the uncertainty of the National Nuclear Security Administration's ability to execute its current programmed work ... raises questions as to the feasibility of effectively accomplishing this new emergent work."

The nonpartisan Government Accountability Office said in a report to Congress last month that the Navy's reluctance to contribute funds for the interoperable warhead project, along with budget constraints that limit its ability to do so, could ultimately make it "poorly positioned to undertake the more-detailed analyses needed validate the interoperable warhead on Navy systems, resulting in further program delays and potentially costly modifications."

According to one congressional aide with knowledge of the issue, the administration might put off much of the work related to the interoperable warhead project for about five years.

"They'll do some studies, and they need to do some studies, to figure out if this whole thing makes sense, but actually guns blazing, 'Let's go do this thing,' I think may be pushed out," said the congressional staffer, who was not authorized to discuss the issue publically and asked not to be named.

The aide expected increasing budget constraints -- among them so-called sequestration funding cuts and limits caused by Congress approving only continuing budget resolutions rather than annual appropriations bills -- would be the main drivers causing the administration to potentially revisit the plan it issued only months ago.

"When you have one year when you're cut \$35 billion and another year where you're being cut \$55 billion, things become very crystal clear," the staffer said. "I think everyone's jaw dropped when they came out with that 25-year stockpile stewardship management plan where they show ... that this IW-1 would be something like \$14 billion over 10 years."

In contrast, refurbishment of the W76 warhead is costing "only about \$3 or \$4 billion," the aide said.

A second congressional staffer noted that the interoperable warheads are among several other projects included in the 25-year plan. Others include the

controversial refurbishment of the B61 gravity bomb, the development of a new intercontinental-ballistic missile and a new bomber for the Air Force. Lawmakers are also looking into why the plan accelerates the development of a new cruise missile, according to the aid.

"There's a lot in the mix," the aide said, noting the proposal calls for several of these projects to occur simultaneously. This contrasts with the present time, when the only warhead refurbishment project in the production phase is the W76, which already is running into issues with cost overruns and scheduling.

"I think there's concern about whether or not they can deliver," the aide said.
"Are they biting off more than they can chew?"

The administration is "still trying to pull together a lot of those answers," according to a third congressional aide. "I wouldn't be surprised if there was a push to reevaluate their ideas for the interoperable warhead."

Some watchdog groups, meanwhile, argue that developing the interoperable warheads is tantamount to the United States developing new nuclear weapons.

"Creating new weapon types -- even if they only use weapon components of existing designs -- would be viewed by many as violating the administration's pledge not to develop new nuclear weapons, and could generate concerns about weapon reliability," the Union of Concerned Scientists says in a report it released last week.

Activists, along with some lawmakers, have also raised cost and reliability concerns regarding the B61 gravity bomb life extension.

The Senate Appropriations Committee in June approved legislation that would cut the Obama administration's fiscal 2014 request for the project by \$168 million. Accompanying report language said the committee is concerned the NNSA refurbishment plan "is not the lowest cost, lowest risk option," and that its cost estimate "has doubled in the past two years as work scope has increased."

The B61 issue is expected to be in the spotlight again on Tuesday, when the House Armed Services Committee is planning to hold a hearing on nuclear weapons modernization programs.

However, while revisiting the plan to replace the W78 and W88 warheads with an interoperable device is likely, it may be more difficult to prod the administration into stepping back from its B61 plans, the first congressional aide suggested.

"They're so far along in the B61 program that it's hard for them to divest themselves from that from a budgetary standpoint and as a result I think they're looking at programs that haven't necessarily started up and that they're still doing studies on," the aide said.

As far as the W88 warhead goes, a December 2012 memo by the Nuclear Weapons Council suggests that, in addition to looking at the possibility of a replacement interoperable with the W78, it will develop a life extension option "based on the current design." However, language in the memo stating that "surety enhancements will be considered objective requirements for this option," is causing concern among activists that the study will not truly consider a simple refurbishment of the existing weapon.

The surety enhancements "may lead to two designs of which neither is the narrowly-scoped refurbishment necessary for maintenance of the stockpile," said Marylia Kelley, executive director of Tri-Valley CAREs. "That said, new budget realities are just beginning to impact NNSA planning, and I do expect that some internal pressure will come to bear."

Asked to comment, NNSA spokesman Josh McConaha said only that the agency works closely with its "partners at the Department of Defense to execute the president's priorities."

Defense Department officials could not be reached for comment.

<u>The sequester: A new lever for reducing the U.S. nuclear arsenal?</u>

Walter Pincus, The Washington Post October 21, 2013 LINK

Will the threat of a continued sequester yield rational changes to the U.S. nuclear weapons program?

It won't save much money in the short run, but it's an opportunity to apply some logic to the Cold War thinking that hangs over these most destructive weapons.

The fiscal 2014 continuing resolution, thanks to sequestration, cuts almost \$1 billion from President Obama's requested \$7.9 billion for the weapons program of the National Nuclear Security Administration (NNSA), the Energy Department outfit that runs the nation's nuclear weapons complex.

If the \$6.9 billion projected by the Congressional Budget Office for the NNSA weapons program is maintained for fiscal 2014, it "could soon accomplish what arms control activists have repeatedly failed to do, curbing the rapid growth of the U.S. nuclear weapons budget," according to an analysis in the Albuquerque Journal, the New Mexico newspaper that closely follows the nation's nuclear weapons laboratories.

Budget cuts have already affected long-range Defense Department plans to replace the triad of strategic nuclear delivery systems. The next generation of Ohio-class strategic submarines has been cut by two -- to 12 -- and development work on the first one has been extended by two years. Research for a new strategic bomber and a new land-based intercontinental ballistic missile (ICBM) have slowed.

Long term, it's the replacement of the delivery systems that could cost more than \$100 billion in future years. But the bombers can carry conventional weapons, the submarines can serve alternative functions and the ICBMs can be upgraded to last for over a decade more.

It's been one of the ironies of the Obama administration that in order to get enough GOP Senate support for the New Strategic Arms Reduction Treaty (New START) with Russia in 2010, the president had to agree to increase over the next decade the money spent on the nuclear weapons complex. He also had to agree to replace the three types of delivery systems.

Oddly, in contrast, while President George W. Bush sharply reduced the number of strategic nuclear weapons, he was never pressed to spend the large amounts needed to modernize the nuclear weapons complex, much of which dates to the Manhattan Project.

So, over the past three years, Congress, with administration support, has kept increasing funds for the nuclear weapons program while other discretionary spending, including for defense, was being cut. Funds grew incrementally from \$6.8 billion in fiscal 2010 to \$7.56 billion in fiscal 2013.

One problem: Increased costs of NNSA projects have eaten up what's been appropriated. The Government Accountability Office (GAO) has for years put the NNSA on its "high-risk list" because of its poor planning, bad financial management, and waste and abuse in major construction contracts.

For example, the aging plutonium facility at Los Alamos National Laboratory was set for replacement. In 2005, the NNSA approved the Chemistry and Metallurgy Research Replacement (CMRR) project at an estimated cost of \$975 million.

By 2010 the cost had "increased six-fold . . . to an estimated high of \$5.8 billion," the GAO said. Though the GOP forced Obama to fund CMRR plans as part of the New START deal, the administration deferred its construction for five years in order to pay for higher-priority projects such as the Uranium Processing Facility (UPF) at Oak Ridge, Tenn.

A GAO report released in July said that since 2010 the "UPF had experienced significant cost increases. More recently, the upper bound of the UPF's cost range has increased from approximately \$1.1 billion in 2004 to \$6.5 billion."

Last week, the Union of Concerned Scientists, a nonprofit science advocacy group that questions spending on the nuclear program, issued a report that claimed the UPF "may have more capacity than needed to produce new canned [nuclear weapon] subassemblies." It called for a delay in constructing the costly UPF "until the production capacity required to support the stockpile is clearer."

So just what does the United States need?

Forget going to zero. Nuclear weapons will not vanish, and therefore this country must maintain a complex of facilities to continue to monitor its stockpile and ensure the weapons that remain are secure and reliable.

Numbers are set by treaties with Russia. By February 2018, each country is limited to 800 delivery systems -- land-based or submarine-based ICBMs or strategic bombers -- but only 700 can be deployed. The number of deployed strategic nuclear warheads will go down to 1,550, but there is no cap on non-deployed warheads.

As of April 2013, according to State Department figures, Russia already was eight below the 500 limit in deployed delivery systems. The United States was over by 92. Both countries were 200 above in non-deployed systems. Russia also had 70 fewer deployed warheads than allowed by the 2010 treaty while the

United States was above the 2018 limit by 104.

Cold War veterans and Obama critics want to tie further nuclear reductions to Moscow's actions. They cite Russia's several thousand tactical nuclear weapons as a barrier to the United States going below New START levels in strategic or tactical weapons.

The Cold War is over. Threats have changed, and new thinking is required. Two nuclear weapons ended World War II, killing or injuring upwards of 200,000 people. Today's strategic warheads have much greater explosive power and play more of a foreign policy or domestic political role rather than an actual military one.

Fewer would be better, and it is almost funny that it is their cost -- which, comparatively, is minimal -- rather than logic that ultimately may force a change in nuclear weapons policy.

Illinois Biggest Atomic Dump as U.S. Fails to Pick Site

Brian Wingfield, Bloomberg October 25, 2013 LINK

U.S. lawmakers have debated for decades where to put all the spent fuel generated by the nation's nuclear power plants. The dithering means that an unintended site has emerged: Illinois.

About 13 percent of America's 70,000 metric tons of the radioactive waste is stashed in pools of water or in special casks at the atomic plants in Illinois that produced it, according to the Nuclear Energy Institute, a Washington-based industry group. That's the most held in any state.

Across the country, atomic power plants "have become de facto major radioactive waste-management operations," Robert Alvarez, a former adviser to Energy Department secretaries during President Bill Clinton's administration, said in a phone interview.

With no place to send their waste, power plants in 30 states -- which generate about 20 percent of the nation's electricity -- are doubling as dumps for spent fuel that remains dangerous for thousands of years. Another four states without operating reactors store spent fuel at closed plants. It is an expensive and, according to some critics, unsafe practice for which the plants weren't designed and that may end up costing taxpayers billions of dollars.

"That's not a long-term solution," Everett Redmond, senior director of non-proliferation and fuel cycle policy at NEI, whose members include reactor owners Exelon Corp. of Chicago and Southern Co. of Atlanta. There's a "general obligation to society to dispose of the material," Redmond said in a phone interview.

Yucca Mountain

After Illinois, which also has more reactors than any other state, Pennsylvania, South Carolina and New York have the most waste temporarily stored at power

plants.

Since 1998, the U.S. government has been required by law to remove nuclear waste from plants and haul it to a secure disposal site -- though it hasn't because none has been built. Congress in 1987 designated one for Nevada's Yucca Mountain, a project that President Barack Obama's administration cut funding for in 2010 at the urging of Senate Majority Leader Harry Reid, a Nevada Democrat.

In the meantime, utilities and other power providers have sued the U.S. almost 80 times to recover their storage costs, winning \$2 billion in judgments and settlements. Taxpayers may be forced to pay as much as \$20.8 billion by 2020 as the liability grows, according to a report last year from a commission Obama created to study waste-storage options.

With as many as 70 operating reactors scheduled to close by 2050, maintenance and security costs may reach a combined \$550 million annually, according to the commission. The panel's 15 members included future Nuclear Regulatory Commission Chairman Allison Macfarlane and future Energy Secretary Ernest Moniz.

Waste Fund

Since 1983, the federal government has collected money from utility customers for the Nuclear Waste Fund to help pay for the removal of waste. The fund now has more than \$29 billion, though a repository has never been cleared for construction. The Nuclear Energy Institute and the National Association of Regulatory Utility Commissioners have sued the Energy Department to stop collecting the fee, a case that is pending in federal court. A U.S. court in August ordered the NRC to resume its study of Yucca, which the agency has begun, though it says it doesn't have enough money to complete.

The U.S. "cut a deal, and they haven't honored that," leaving taxpayers and utility customers exposed to higher costs, David Wright a consultant and former NARUC president, said by phone.

Dry Casks

Once used, radioactive fuel rods are removed from reactors and stored in cooling pools at the plants. The reactor owner can transfer the waste to steel and concrete casks once the fuel has cooled for about five years.

A dry-cask storage facility at a plant can cost as much as \$20 million to build and \$7 million a year to maintain, according to the industry group, and about 71 percent of the nation's spent fuel now remains in the pools. Some environmental groups say that percentage is too high and that more of the waste should be moved to the casks, which are made by companies including Areva SA of Paris, as soon as possible.

"If the cooling water in the spent fuel pool was drained by an accident or terrorist attack, there would be a much greater chance of a dangerous fire that could spread radiation," Giselle Barry, a spokesman for Senator Edward Markey, said in an e-mail. Markey has been critical of safety measures at Entergy Corp.'s Pilgrim reactor, about 38 miles (61 kilometers) southeast of

Boston.

Fukushima Lesson

When a tsunami triggered a triple-meltdown at Japan's Fukushima Dai-Ichi plant in March 2011, the nuclear waste that was stored in dry casks was protected, according to David Lochbaum, director of the Union of Concerned Scientists' Nuclear Safety Project.

Still, "dry casks aren't absolutely safe," he said by phone. While the risk of sabotage is minimal during their storage at nuclear plants, it is possible, Lochbaum said. "It would be preferable if they were in Yucca Mountain or some repository."

Alvarez, the former Clinton Energy Department official who is also a senior scholar at the Institute for Policy Studies in Washington, said "dry storage is the best of the solutions we have."

It's not perfect: Utilities can't be expected to maintain dry cask storage for thousands of years while the radioactive material inside them decays, according to Thomas Cochran, a senior scientist in the nuclear program at the Natural Resources Defense Council in Washington.

100 Years

"You've got to repackage them every 100 years," he said in a phone interview. "Saying you're going to do that for the next half a million years is a little over the top."

Obama's Blue Ribbon Commission recommended in its report last year that the U.S. begin work on a temporary storage site.

"Regardless of what happens with Yucca Mountain, the U.S. inventory of spent nuclear fuel will soon exceed the amount" that the facility could have legally held, it said.

"Moreover, these communities were never asked about, and never contemplated or consented to, the conversion of these reactor sites into indefinite long-term storage facilities," the commission said.

Mich. senators to Kerry: Stop Canadian nuclear waste near lake

Ramsey Cox, The Hill October 22, 2013 LINK

Sens. Carl Levin (D-Mich.) and Debbie Stabenow (D-Mich.) urged Secretary of State John Kerry to stop Canada from storing its nuclear waste near Lake Huron in Ontario.

"The placement of this nuclear waste storage facility is of great concern given its location near Lake Huron and the importance of the Great Lakes to tens of

millions of U.S. and Canadian citizens for drinking water, fisheries, tourism, recreation, and other industrial and economic uses," the senators wrote in a letter sent to Kerry on Monday.

Levin and Stabenow said Kerry should engage the International Joint Commission on the proposed dumping site, adding that since the lake is an internationally shared resource both countries should have to approve the underground facility.

"We believe that the decision to store such large quantities of nuclear waste along the shores of an internationally shared resource must be thoroughly reviewed and considered by both countries," Levin and Stabenow wrote. "We strongly urge you to engage the International Joint Commission on this important topic and also encourage the Canadian government to reconsider placing a nuclear waste dump near the shores of Lake Huron."

Canada needs a place to dump the waste from the Bruce nuclear power site. The proposed underground storage facility would hold more than 200,000 cubic feet of waste just 1 mile from the lake shore. The senators said the Canadian government could begin construction as early as 2014 since the project is currently under final review.